

HE UNITED STATES PATENT AND TRADEMARK OFFICE

Serial No.:

09/429,939

Filed:

10/29/99

Applicant:

Authier

For:

Water Freeze Control for Hot Tub Spa

Examiner:

Prunner, Kathleen J.

Group Art:

3751

Amendment B

Commissioner of Patents and Trademarks Washington, DC 20231

Sir

This letter is in response to Office Action dated 4/20/01. Please amend the above-identified patent application as follows:

In the Claims:

Please cancel Claims 1 - 12.

Please add new Claims 13 - 25.

13. A freeze control system, comprising:

A. a spa tub containing water,

B. spa piping for circulating water to and from said spa tub,

C. a heating element for heating the water,

D. at least one pump for pumping the heated water,

E. a first sensor for detecting the temperature of the water in the spa tub,

F. a second sensor for detecting the temperature of the ambient air around the spa's equipment, and

G. a computer programmed to process signals generated by said first sensor and said second sensor, wherein said computer selectively activates and deactivates said heating element and said at least one pump, so that the temperature of the water inside said spa tub and said spa piping is maintained above the freezing level.

CERTIFICATE OF MAILING

I certify that this document is being deposited on 6/20/01 with the U.S. Postal Service as first class mail under 37 C.F.R. 1.8 and is addressed to the:

Assistant Commissioner for Patents Washington, D.C. 20231

Signature of Person Mailing Correspondence

John R. Ross, III
Typed or Printed Name of Person
Mailing Correspondence

RECEIVED

TECHNOLOGY CENTER R3700

are de la colonia de la coloni

X